

ST. TAMMANY PARISH COUNCIL  
ORDINANCE

ORDINANCE CALENDAR NO. 2887 ORDINANCE COUNCIL SERIES NO. \_\_\_\_\_

COUNCIL SPONSOR MR. GOULD/MR. DEAN PROVIDED BY COUNCIL OFFICE

INTRODUCED BY MR. GOULD, SECONDED BY MR. STEFANCIK ON THE 1<sup>ST</sup> DAY  
OF JULY 2004.

ORDINANCE TO AMEND PARISH CODE OF ORDINANCES,  
APPENDIX B, SUBDIVISION REGULATORY ORDINANCE NO. 499,  
SECTION 40-061.01 HYDROLOGICAL STUDY AND PLAN, TO ADD  
PROVISIONS RELATIVE TO DEVELOPMENTS WITHIN GRAVITY  
DRAINAGE DISTRICT NO. 5.

WHEREAS, proposed subdivision developments are currently required to submit a hydrological study and plan to the parish as part of the preliminary subdivision review process; and

WHEREAS, review of drainage plans for proposed developments within the boundaries of Gravity Drainage District No. 5 by the district utilizing its drainage models, will assist the parish in evaluating the effects of future development of this high growth and high density area of the parish.

THE PARISH OF ST. TAMMANY HEREBY ORDAINS that it amends the Parish Code of Ordinances, Appendix B, Subdivision Regulatory Ordinance No. 499, Section 40-061.01 Hydrological Study and Plan, to add provisions relative to review of drainage plans for developments within the boundaries of Gravity Drainage District No. 5 as follows:

SUBDIVISION REGULATORY ORDINANCE NO. 499

Sec. 40.061.01 Hydrological Study and Plan

1. A hydrological study/plan shall be completed by a qualified hydrologist and shall be submitted by all developers of new subdivision developments.
2. For the purpose of this section, a qualified hydrologist shall be a state registered civil engineer. When a qualified hydrologist creates a study/plan for a particular drainage area, said study/plan must determine the effect(s), if any, of the proposed development on the drainage basin; and the qualified hydrologist shall present engineering proposals, if any, to certify that the rate of runoff will not be increased by the proposed development.
  - A. The Rational Method may be used for determining the storm water runoff peak when the-contributing area is less than or equal to 200 acres up to the time of concentration.
    1. The runoff coefficient shall be selected by the design engineer and shall be appropriate for the subject property and must account for the duration and intensity of the rainfall event.
  - B. When the SCS method or equivalent is used, the following requirements shall apply:
    1. Curve Numbers shall be those published by the Louisiana Department of Transportation and Development and/or the "National Engineering Handbook, Hydrology: Section 4, Chapters 6-12"

2. When using the SCS Method, adjustments requiring disclosure include but are not limited to:

- i. Changes to the 484 IUH coefficient in the peak flow equation.
- ii. Adjustments for ponding, imperviousness and channel improvements.
- iii. Anecedent soil moisture condition.
- iv. Slope and sub area length over width ratio assumptions.
- v. Storm Intensity Distribution, but only if approved by the Parish Engineering Director.
- vi. Proper lag time equations.

C. The Time of Concentration shall be determined for both pre- and post-conditions using consistent methods accepted by the engineering community, e.g., "National Engineering Handbook, Hydrology: Section 4, Chapter 15," and appropriate for the conditions as approved by the Parish Engineer. If the lag method is used, the following restrictions shall apply:

- i. The appropriate area slope as defined by lag equation shall be used.
- ii Adjustments shall be made for channel improvements and impervious areas.

3. Detention design shall be a part of the hydrologic study/plan and shall include detention pond(s) and metering structure(s). Linear detention within roadside ditches is not acceptable and shall not be included as storage areas in the drainage calculations. The plan shall be developed in accordance with the Department of Engineering's review and approval.

A. On site detention requirements may be waived or modified based on hydrological analysis of existing conditions, location of the development within the drainage basin and analysis assuring no negative effect within the basin of the waiver. A waiver is expressly prohibited for developments located within the upper one-third of the drainage basin, unless the runoff resulting from the development can be routed to a regional detention facility. After technical review, the Department of Engineering shall accept or reject the proposed waiver. The waiver will be presented to the planning commission for preliminary approval.

B. If a waiver is accepted pursuant to the previous paragraph, in lieu of on site detention, the developer shall be assessed a Drainage Fee. This fee shall be payable to the Parish or designated drainage district for the sole purpose of making improvements to the affected drainage basin. The fee shall be due prior to the issuance of any work orders by the Parish.

C. The drainage fee shall be per acre, as follows:

A-1, A-2 and A-3 Subdivisions	\$1,500.00
A-4 and A-5 Subdivisions	\$2,000.00
A-6, Commercial and Industrial Subdivisions	\$3,500.00

PUDS of same density as above subdivision designations shall follow the same fee structure.

The fee shall be used solely for planning, acquisition and/or construction of regional detention facilities and/or system improvements within the affected basin.

4. All drainage structures shall be designed to provide for reductions in peak rate of runoff for all storm events up to the 100 year storm. The peak rate of runoff for the 25, 50 and 100 year storm shall be reduced by 25%. At no time shall the peak rate of runoff exceed that of the pre-development conditions of the subject parcel. Calculations shall be provided for the 25, 50 and 100 year storm events that display the effects of a 2 and 24 hour duration.
5. Pre-development calculations shall be based on the "heavily forested" condition unless otherwise approved by the Department of Engineering.
6. No fill shall be placed in any flood zones designated as AO/AH or A1-A30 without an approved fill plan. All fill for residential home construction shall conform to Ordinance 2183-AA adopted July 5, 2001. Finished floor elevation shall be at least 6" above nearest adjacent road and also conform to the rules and regulations promulgated by Federal Emergency Management Agency (FEMA) and National Flood Insurance Program (NFIP).
7. All subdivisions receiving Tentative approval prior to the effective date of this ordinance will be governed by the previous drainage requirements.
8. A subdivision development located within the boundaries of Gravity Drainage District No. 5 shall, at the same time, also submit its hydrological study and plan to the District for review and comment to the Parish Engineer. All costs associated with the review of the plans by the Drainage District shall be assessed to the developer. The District shall submit its comments to the Parish Engineer within 30 days of receipt of the plan. The Parish Engineer shall have final authority on approval of the proposed hydrological plan.

REPEAL: All Ordinances or parts of Ordinances in conflict herewith are hereby repealed.

SEVERABILITY: If any provision of this Ordinance shall be held to be invalid, such invalidity shall not affect other provisions herein which can be given effect without the invalid provision and to this end the provisions of this Ordinance are hereby declared to be severable.

EFFECTIVE DATE: This Ordinance shall become effective fifteen (15) days after adoption.

MOVED FOR ADOPTION BY: \_\_\_\_\_, SECONDED BY: \_\_\_\_\_

WHEREUPON THIS ORDINANCE WAS SUBMITTED TO A VOTE AND RESULTED IN THE FOLLOWING:

YEAS:

NAYS:

ABSTAIN:

ABSENT: